

Linear Equations 0910

- 1) Use the equation $y = 3x + 4$ to find y if $x = 5$.
- 2) Find the value of $4x - 2y$ if $x = -2$ and $y = 4$.
- 3) Read carefully, use the equation $y = -\frac{1}{2}x - 2$ to find x if $y = 2$.
- 4) Use the equation $3x + 4y = 21$ to find y if $x = -1$.
- 5) Solve for x .
 - a) $2x + 5 = 11$
 - b) $4x + 7 = 6x + 1$
 - c) $x \div 3 + 7 = 13$
 - d) $3(x + 1) = 24$
- 6) Solve the equation $2x + y = 3$ for y .
- 7) Solve the equation $-5x + 2y = 34$ for y .
- 8) Write an equation for the line AB in point-slope form passing through the points (3, 4) and (5, 12) then convert it to slope-intercept form.

9) Golden Rock Climbing club offers two pay plans. You can drop in for \$12 per visit or you can buy their monthly membership for \$55 and pay only \$6 per visit.

a) Write an equation for both pay plans using x as the number of visits per month

b) How many times would you need to climb per month to have the membership pay off?

10) A phone plan offers two pay plans. Plan A is \$15 plus 2 cents per call and Plan B has no monthly fee and is 3 cents per call.

a) Write an equation for both pay plans using x as the number of minutes used per month.

b) How many minutes would you need to use per month for Plan A to be a better deal?

11) A pizza shop offers a medium cheese pizza with 2 toppings for \$6. Each additional topping is 25 cents.

c) Write an equation for the cost of a pizza depending on the number of toppings.

d) How many toppings would you get if the pizza cost \$8.50. Use your equation and solve to find your answer.